

=====

Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Thu Nov 01 11:52:57 EDT 2007

=====

Reviewer Comments:

<210> 7

<211> 999

<212> DNA

<213> Bovine Lactate Dehydrogenase

The above <213> response is invalid, per Sequence Rules. The only valid <213> responses are: the Genus species of the organism, "Artificial Sequence," or "Unknown." "Artificial Sequence" and "Unknown" require explanation in the <220>-<223> section. For the above <213> response, you could indicate the Genus species, and insert "Lactate Dehydrogenase" on the <223> line, as explanatory matter. Same error in Sequence 8.

<400> 47

atatatgaat tctttgattg atttgactgt g

31

Please remove the above non-ASCII character "square" at the end of the submitted file.

Application No: 10578614 Version No: 1.0

Input Set:

Output Set:

Started: 2007-10-19 13:49:51.548
Finished: 2007-10-19 13:49:53.539
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 991 ms
Total Warnings: 40
Total Errors: 0
No. of SeqIDs Defined: 47
Actual SeqID Count: 47

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)
W 213	Artificial or Unknown found in <213> in SEQ ID (27)

Input Set:

Output Set:

Started: 2007-10-19 13:49:51.548
Finished: 2007-10-19 13:49:53.539
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 991 ms
Total Warnings: 40
Total Errors: 0
No. of SeqIDs Defined: 47
Actual SeqID Count: 47

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (28)
W 213	Artificial or Unknown found in <213> in SEQ ID (29) This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Ishida, Nobuhiro
Tokuhiro, Kenro
Nagamori, Eiji
Takahashi, Haruo
Saito, Satoshi
Ohni Shi, Tohru

<120> Promoter in the presence of organic acid and utilization thereof

<130> 290578US0XPCT

<140> 10578614
<141> 2007-10-19

<150> PCT/JP04/16799
<151> 2004-11-05

<150> JP 2003-379076
<151> 2003-11-07

<160> 47

<170> PatentIn version 3.3

<210> 1
<211> 810
<212> DNA
<213> *Saccharomyces cerevisiae*

<400> 1

ctcgctcgca gccacgggtc aacccgattt ggatcacccc actggggccc aagcctgata	60
tccgacctcc atgaaatttt ttttttctt tcgatttagca cgcacacaca tcacatagac	120
tgcgtcataa aaatacacta cggaaaaacc ataaagagca aagcgatacc tacttggaaag	180
gaaaaggagc acgcttgtaa gggggatggg ggctaagaag tcattcactt tctttccct	240
tcgcggtccg gacccgggac ccctcctctc cccgcacgat ttcttcctt catatcttcc	300
tttattcct atcccggtga agcaaccgca ctatgactaa atggtgctgg acatctccat	360
ggctgtgact tgtgtgtatc tcacagtggt aacggcaccg tggctcgaa acggttcctt	420
cgtgacaatt ctagaacagg ggctacagtc tcgataatacg aataataagc gcattttgc	480
tagcgccgccc gcggcgcccc tttcccaata gggaggcgca gtttatcgcc ggagctctac	540
ttcttcctat ttgggtaagc cccttctgt tttcgccag tggttgctgc aggctcgcc	600
ggagaacata gtgataaggg atgttaacttt cgatgagaga attagcaagc ggaaaaaaaaac	660
tatggcttagc tgggagttgt tttcaatca tataaaaggg agaaaattgtt gctcactatg	720

tgacagttc tgggacgtct taactttat tgcagaggac tatcaaatca tacagatatt 780
gtcaaaaaaa aaaaagacta ataataaaaaa 810

<210> 2
<211> 869
<212> DNA
<213> *Saccharomyces cerevisiae*

<400> 2
cttgacgggt attctgagca tcttactcag tttcaagatc ttttaatgtc caaaaacatt 60
tgagccgatc taaataacttc tgtgtttca ttaatttata aattgtactc ttttaagaca 120
tggaaagtac caacatcggt tgaaacagtt tttcatttac atatggtta ttgggtttc 180
cagtgaatga ttatttgcg ttacccttgc gtaaaagttc taacacgtt ttaagtattg 240
tttagttgct cttcgacat atatgattat ccctgcgcgg ctaaagttaa agatgcaaaa 300
aacgtaagac aactgaagtt aatttacgtc aattaagttt tccaggtaa tgatgtttg 360
ggcttccact aattcaataa gtgtgtcatg aaatacgttg tgaagagcat ccagaaataa 420
tggaaaagaaa caacgaaact gggtcggcct gttgttctt ttctttacca cgtgatctgc 480
ggcatttaca ggaagtcgct cggtttgcgc agttgttgca acgcagctac ggctaacaaa 540
gccttagtgga actcgactga tgtgttaggg cctaaaactg gtggtgacag ctgaagtgaa 600
ctattcaatc caatcatgtc atggctgtca caaagacattt gcggaccgca cgtacgaaca 660
catacgatcg ctaatatgtt tttgtatagt acccagtgtat cgcagacctg caatttttt 720
gtaggttgg aagaatataa aaagggttgca ctcattcaag atagttttt tcttgtgtgt 780
ctattcattt tattattgtt tgtttaatgtt ttaaaaaaaac caagaactta gtttcaaatt 840
aaattcatca cacaacaaaa caaaacaaaa 869

<210> 3
<211> 957
<212> DNA
<213> *Saccharomyces cerevisiae*

<400> 3
gcctcgctaa acacgcctta ctaaacactt caaaagcaac ttaaaaatatt tttatctaat 60
tatacgctaa acccaatgtg aaagacatatacatactgtaa aagtggaaaaa gcagcaccgt 120
tgaacgcccgc aagagtgctc ccataacgct ttactagagg gctagatttt aatggcccct 180
tcatggagaa gttatgagga caaatccac tacagaaagc gcaacaaatt tttttttccg 240
taacaacaaaa catctcatct agtttctgcc ttaaacaag ccgcagccag agccgtttt 300

ccgccccatatt tatccaggat tgttccatac ggctccgtca gaggctgcta cgggatgttt 360
tttttttacc ccgtggaaat gaggggtatg caggaatttgc tgccgggttag gaaatcttt 420
tttttttag gaggaacaac tggtggaaga atgcccacac ttctcagaaa tgcacatgcagt 480
ggcagcacgc taattcgaaa aaattctcca gaaaggcaac gcaaaatttt ttttccaggg 540
aataaaactt ttatgaccca ctacttctcg taggaacaat ttccggccccc tgcgtgtct 600
tctgagggttc atctttaca ttgcctctg ctggataatt ttccagaggca acaaggaaaa 660
attagatggc aaaaagtgcgt ctttcaagggaaaatccccca ccatcttgc agatccccctg 720
taacttatttgc gcaactgaaa gaatgaaaag gaggaaaata caaaatatac tagaactgaa 780
aaaaaaaaaaag tataaataga gacgatatac gccaataactt cacaatgttc gaatctattc 840
ttcatttgca gctattgtaa aataataaaa catcaagaac aaacaagctc aacttgcgtt 900
ttctaagaac aaagaataaaa cacaaaaaaca aaaagtttt ttaattttaa tcaaaaa 957

<210> 4
<211> 940
<212> DNA
<213> *Saccharomyces cerevisiae*

<400> 4
cgctgaatac gtcctgtcaa ttcaaatata tcacgtgtg agcagcccta aagaagaaaa 60
cctcaacagc agtattacta ttacaatcaa acaacttttag tgccgcgtga taccgggggt 120
tgaagtgggt gcattgagcc gtattcttct tccccgtaaag aaagttgtgt atcctttta 180
ctgcgttgcata atagcttctg aaaacctaaa aatgaacgc tatgttagctc atatccgtt 240
tgcataagta agaataacta ctgtgcagg gtgccgaaag ggatggaaaa ccgctgcagc 300
aacccttgtt acatacagtc ggatccatct gacttacttt cctgcgtct ccctgcgcga 360
ttttgttggc cattttccag atcctctaga attttcaag ggtcgagccg taggaggatt 420
ctctcagaag gcaaaaacgc atcgaaagcg tgctttgtaa gaatatttgg tatggctaaa 480
gtaagcaaag ccatatcccg atcccgatcc cgactcttac tccgatccct tccgccacat 540
cctgcgttatttgcata ccaaaatttcg tcattttctgt tatttcatca tccctttctg 600
ctatggcaag gacaagttt tttcttagcat ctcatcgaaa actttcctct ccctaattgg 660
ccaaagttt catattcatc atcagttaga aagtataata tcaatccctt acctcattac 720
aagttgtatc acactaaaaa aatcatataat aagtctgtga gagtcttcaa ttatggcg 780
taacacccat tcactttcta atcttgcgttcc ttgtttttac attctgcaat acaacacaac 840

aacaaatatt aactcaatta ttattattta taattacaaa aacaaaacaa caagttttag 900

acttaatat ctttttagata ctaaaaacaa caaatttcaa 940

<210> 5

<211> 800

<212> DNA

<213> *Saccharomyces cerevisiae*

<400> 5

cgcacatccgaa ttcaatgttag cacctgagat ctcaaatacg ttttggccaa tcctaatttt 60

gaaaacttca tggtttggta aaagctcgaa ggttagtttct aactcttttgc tataaaccac 120

gatctcgccc ttttggccag acatctgata tgagcgtgcg tgtgagtgcac tttacacttg 180

tctatccacg tcctgaagtt gttcgtgttc tttggatatt cgtgttcaag ctaataatga 240

gcctttaagg taatacaatt tataaaccac caccttggcc tcgatctatt gcgcttatgt 300

tgtctattag taatcaagaa aagaacccta aatcatcgcc gtccttgcg gggctctcg 360

aaaaaccggcgtt cctgacgtca ctgaaaagat ttccggcacat ggtcatggga ccagagaaaa 420

attaatccga catgttggaaat atttccttcc gttttaggttgc tgagcgcgaa ttttttctga 480

tttggtaatttta tacggggagc tctggccaaa aaggtcagta tttgggtatgc aagttgaata 540

tcatcttttgc attttcttct gtatcattct ttttctttt ccacacccct tccggacgg 600

attcacatatt tggtagagg ttaaatgaaa aataaagggg tggaaaatttta aggacgagat 660

gtaagggaaa agcataaaacg aaacattata taaaggagca caatttcctc tcccttgc 720

attgtgcata taccgtttct ttataacgaa atttcaacaa accagaacaa cacaagtact 780

accaataacc acaacaaaac 800

<210> 6

<211> 901

<212> DNA

<213> *Saccharomyces cerevisiae*

<400> 6

tcgatggaaatgc caaatgttagt ccgggttacca agagacccaa acctttcc 60

ctttactatt tctcccttgc gaaatatac agtttgcgggt aataggtaat atgaaaaagg 120

caataaaaaaa aagagataact tgcaccatc tcgtctccct ttacctttt tacttaatct 180

tcttcgtcgt catctgttcc atcccttcc tagcttagtc ttctccggct agttcttagt 240

gcggtaagca aaaaaatagc gtttttttc cctcaccagg acttttttg ttaaccgaaa 300

atcggcatct ctagtttcc tggacaaaaa agacaaaatg gaaataaaca ctcatacgaa	360
tcagtaaaga tgtaaataat cgcagtaacg actgcacaag gatgtcagaa aaagcagtt	420
aattccagaa gtggtttcc aatttatcac acatgtacat gaagggaaat gttaaatac	480
ggtcttcgta aaacaaagga tctcttcacc tggtttctc atttataagt agtgccttt	540
tcggtaactt aagatatac cttatattctt tcccacttct cgttatttct tcttttccc	600
ttttcaagtt cttctttta ttatttatta agtttatttt aattcttaga tcgttgcac	660
tatctttgt ccttattgtt aagaaacatt gcgaagaaaa agaataataa aagaaactca	720
aaaaaaaaag aagtttcctc gaacaaaaat attattatcc caataacttt ttctttct	780
acatccaatt tttgaccct atttaacat taatttttg cttaatttt aactaataacc	840
taatttcact taatatctaa tcatcttcct ttaaccacaa gaacaaagaa gaaaataac	900
a	901

<210> 7
 <211> 999
 <212> DNA
 <213> Bovine Lactate Dehydrogenase

<220>	
<221> CDS	
<222> (1)..(999)	
<400> 7	
atg gca act ctc aag gat cag ctg att cag aat ctt ctt aag gaa gaa	48
Met Ala Thr Leu Lys Asp Gln Leu Ile Gln Asn Leu Leu Lys Glu Glu	
1 5 10 15	
cat gtc ccc cag aat aag att aca att gtt ggg gtt ggt gct gtt ggc	96
His Val Pro Gln Asn Lys Ile Thr Ile Val Gly Val Gly Ala Val Gly	
20 25 30	
atg gcc tgt gcc atc agt atc tta atg aag gac ttg gca gat gaa gtt	144
Met Ala Cys Ala Ile Ser Ile Leu Met Lys Asp Leu Ala Asp Glu Val	
35 40 45	
gct ctt gtt gat gtc atg gaa gat aaa ctg aag gga gag atg atg gat	192
Ala Leu Val Asp Val Met Glu Asp Lys Leu Lys Gly Glu Met Met Asp	
50 55 60	
ctc caa cat ggc agc ctt ttc ctt aga aca cca aaa att gtc tct ggc	240
Leu Gln His Gly Ser Leu Phe Leu Arg Thr Pro Lys Ile Val Ser Gly	
65 70 75 80	
aaa gac tat aat gtg aca gca aac tcc agg ctg gtt att atc aca gct	288
Lys Asp Tyr Asn Val Thr Ala Asn Ser Arg Leu Val Ile Ile Thr Ala	
85 90 95	

ggg gca cgt cag caa gag gga gag agc cgt ctg aat ttg gtc cag cgt	336		
Gly Ala Arg Gln Gln Glu Gly Glu Ser Arg Leu Asn Leu Val Gln Arg			
100	105	110	
aac gtg aac atc ttt aaa ttc atc att cct aat att gta aaa tac agc	384		
Asn Val Asn Ile Phe Lys Phe Ile Ile Pro Asn Ile Val Lys Tyr Ser			
115	120	125	
cca aat tgc aag ttg ctt gtt tcc aat cca gtc gat att ttg acc	432		
Pro Asn Cys Lys Leu Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr			
130	135	140	
tat gtg gct tgg aag ata agt ggc ttt ccc aaa aac cgt gtt att gga	480		
Tyr Val Ala Trp Lys Ile Ser Gly Phe Pro Lys Asn Arg Val Ile Gly			
145	150	155	160
agt ggt tgc aat ctg gat tca gct cgc ttc cgt tat ctc atg ggg gag	528		
Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Met Gly Glu			
165	170	175	
agg ctg gga gtt cac cca tta agc tgc cat ggg tgg atc ctt ggg gag	576		
Arg Leu Gly Val His Pro Leu Ser Cys His Gly Trp Ile Leu Gly Glu			
180	185	190	
cat ggt gac tct agt gtg cct gta tgg agt gga gtg aat gtt gct ggt	624		
His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Val Ala Gly			
195	200	205	
gtc tcc ctg aag aat tta cac cct gaa tta ggc act gat gca gat aag	672		
Val Ser Leu Lys Asn Leu His Pro Glu Leu Gly Thr Asp Ala Asp Lys			
210	215	220	
gaa cag tgg aaa gcg gtt cac aaa caa gtg gtt gac agt gct tat gag	720		
Glu Gln Trp Lys Ala Val His Lys Gln Val Val Asp Ser Ala Tyr Glu			
225	230	235	240
gtg atc aaa ctg aaa ggc tac aca tcc tgg gcc att gga ctg tca gtg	768		
Val Ile Lys Leu Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val			
245	250	255	
gcc gat ttg gca gaa agt ata atg aag aat ctt agg cgg gtg cat ccg	816		
Ala Asp Leu Ala Glu Ser Ile Met Lys Asn Leu Arg Arg Val His Pro			
260	265	270	
att tcc acc atg att aag ggt ctc tat gga ata aaa gag gat gtc ttc	864		
Ile Ser Thr Met Ile Lys Gly Leu Tyr Gly Ile Lys Glu Asp Val Phe			
275	280	285	
ctt agt gtt cct tgc atc ttg gga cag aat gga atc tca gac gtt gtg	912		
Leu Ser Val Pro Cys Ile Leu Gly Gln Asn Gly Ile Ser Asp Val Val			
290	295	300	
aaa gtg act ctg act cat gaa gaa gag gcc tgt ttg aag aag agt gca	960		
Lys Val Thr Leu Thr His Glu Glu Ala Cys Leu Lys Lys Ser Ala			
305	310	315	320

gat aca ctt tgg ggg atc cag aaa gaa ctg cag ttt taa 999
Asp Thr Leu Trp Gly Ile Gln Lys Glu Leu Gln Phe
325 330

<210> 8
<211> 332
<212> PRT
<213> Bovine Lactate Dehydrogenase

<400> 8

Met Ala Thr Leu Lys Asp Gln Leu Ile Gln Asn Leu Leu Lys Glu Glu
1 5 10 15

His Val Pro Gln Asn Lys Ile Thr Ile Val Gly Val Gly Ala Val Gly
20 25 30

Met Ala Cys Ala Ile Ser Ile Leu Met Lys Asp Leu Ala Asp Glu Val
35 40 45

Ala Leu Val Asp Val Met Glu Asp Lys Leu Lys Gly Glu Met Met Asp
50 55 60

Leu Gln His Gly Ser Leu Phe Leu Arg Thr Pro Lys Ile Val Ser Gly
65 70 75 80

Lys Asp Tyr Asn Val Thr Ala Asn Ser Arg Leu Val Ile Ile Thr Ala
85 90 95

Gly Ala Arg Gln Gln Glu Gly Glu Ser Arg Leu Asn Leu Val Gln Arg
100 105 110

Asn Val Asn Ile Phe Lys Phe Ile Ile Pro Asn Ile Val Lys Tyr Ser
115 120 125

Pro Asn Cys Lys Leu Leu Val Val Ser Asn Pro Val Asp Ile Leu Thr
130 135 140

Tyr Val Ala Trp Lys Ile Ser Gly Phe Pro Lys Asn Arg Val Ile Gly
145 150 155 160

Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Leu Met Gly Glu
165 170 175

Arg Leu Gly Val His Pro Leu Ser Cys His Gly Trp Ile Leu Gly Glu

180

185

190

His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Val Ala Gly
195 200 205

Val Ser Leu Lys Asn Leu His Pro Glu Leu Gly Thr Asp Ala Asp Lys
210 215 220

Glu Gln Trp Lys Ala Val His Lys Gln Val Val Asp Ser Ala Tyr Glu
225 230 235 240

Val Ile Lys Leu Lys Gly Tyr Thr Ser Trp Ala Ile Gly Leu Ser Val
245 250 255

Ala Asp Leu Ala Glu Ser Ile Met Lys Asn Leu Arg Arg Val His Pro
260 265 270

Ile Ser Thr Met Ile Lys Gly Leu Tyr Gly Ile Lys Glu Asp Val Phe
275 280 285

Leu Ser Val Pro Cys Ile Leu Gly Gln Asn Gly Ile Ser Asp Val Val
290 295 300

Lys Val Thr Leu Thr His Glu Glu Ala Cys Leu Lys Lys Ser Ala
305 310 315 320

Asp Thr Leu Trp Gly Ile Gln Lys Glu Leu Gln Phe
325 330

<210> 9

<211> 971

<212> DNA

<213> *Saccharomyces cerevisiae*

<400> 9

aagggttagcc tccccataac ataaaactcaa taaaatatat agtcttcaac ttgaaaaagg 60

aacaagctca tgcaaagagg tggcacccgc acgcccggat gcatgcaagt aacctattca 120

aagtaatatc tcatacatgt ttcatgaggg taacaacatg cgactgggtg agcatatgct 180

ccgctgatgt gatgtgcaag ataaaacaagc aagacggaaa ctaacttctt cttcatgtaa 240

taaacacacc ccgcgttat ttaccttatct ttaaacttca acaccttata tcataactaa 300

tatttcttga gataagcaca ctgcacccat acttcctta aaagcgtagc ttccagttt 360

tggtggttcc ggcttccttc ccgattccgc ccgctaaacg catattttg ttgcctggtg 420
gcatttgcaa aatgcataac ctatgcattt aaaagattat gtatgctttt ctgactttc 480
gtgtgatgaa gctcgtggaa aaaatgaata atttatgaat ttgagaacaa ttctgtgttg 540
ttaacggtatt ttactatgga ataattaatc aattgaggat tttatgcaaa tatcgttga 600
atattttcc gacccttga gtactttct tcataattgc ataatattgt ccgctgcccc 660
ttttctgtt agacgggtgc ttgatctact tgctatcggtt caacaccacc ttatttctta 720
actatttttt tttagctca tttagatcag cttatggtga tggcacattt ttgcataaac 780
ctagctgtcc tcgttgaaca tagaaaaaaa aaatatatta acaaggctct ttcactctcc 840
ttgcaatcag atttgggttt gttcccttta tttcatatt tcttgcata ttcccttctc 900
aattattatt ttctactcat aaccacacgc aaaataaacac agtcaaatca atcaaagatc 960
cccccaattct c 971

<210> 10
<211> 20
<212> DNA
<213> Artificial

<220>
<223> Synthetic primer

<400> 10
cgtcgcccttc actgggttag 20

<210> 11
<211> 20
<212> DNA
<213> Artificial

<220>
<223> Synthetic primer

<400> 11
caaaaaggcc aaagcaccag 20

<210> 12
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Synthetic primer

<400> 12
caaggtaagt tgaccggtagt g 21

<210> 13
<211> 22
<212> DNA
<213> Artificial

<220>
<223> Synthetic primer

<400> 13
gatggaagag ttagagtcac cc

22

<210> 14
<211> 20
<212> DNA
<213> Artificial

<220>
<223> Synthetic primer

<400> 14
tcatgggctg tttggtcttc

20

<21